

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of)	
)	
Revision of Part 15 of the Commission's Rules)	ET Docket 98-153
Regarding Ultra-Wideband Transmission)	
Systems)	

**REPLY TO OPPOSITION TO
MOTION FOR INTERIM STAY OF ENFORCEMENT**

and

MOTION FOR ACCEPTANCE OF THIS REPLY

The Ground Penetrating Radar Industry Coalition (GPRIC) files this Reply in the above-captioned docket. The GPRIC includes Geophysical Survey Systems, Inc., Mala Geoscience, Inc., Sensors & Software, Inc., and Underground Imaging Technologies, Inc. These companies account for over 95 percent of the ground penetrating radar (GPR) units sold in the United States.

A. Motion for Acceptance of This Reply

If Section 1.45(d) of the Rules otherwise bars a Reply, then GPRIC respectfully requests a waiver so the Commission may consider this pleading. Inclusion of the present Reply will help the Commission to reach a better-informed decision. The only party that stands to be prejudiced by any resulting delay is GPRIC itself.

B. Background

On June 17, 2002, GPRIC filed a Petition for Partial Reconsideration concerning four rules applicable to GPRs, on the ground they were adopted in contravention of the Administrative Procedure Act (APA).¹ On the same day, GPRIC also filed a Motion for Interim

¹ We challenged Section 15.509(b)(1), limiting GPR operation to certain users; Section 15.525, requiring prior coordination with NTIA; Section 15.509(d), setting GPR

Stay of Enforcement in which we asked the Commission to permit GPR marketing and operation at the Part 15 general limits pending reconsideration. We showed that the request meets the legal criteria for a stay, and we pointed out the complete absence of evidence in an otherwise exhaustive record (or elsewhere, to our knowledge) that GPRs cause interference, or that the challenged rules would alleviate it.²

On June 24, 2002, the U.S. GPS Industry Council (GPSIC) filed the only opposition to our Motion. Noting the absence of GPR rules prior to this proceeding, GPSIC argues that "a stay in effectiveness of the new rules . . . would have the consequence of removing any basis for lawful operation of GPRs"³ Moreover, without rules, GPSIC fears that "GPRs can be expected to increase power [above 1 GHz], thereby risking interference" to licensed services.⁴

C. Reply to Opposition

1. Basis for GPR operation

GPSIC misreads our petition. We did not, as GPSIC says, request a "stay in effectiveness" of the new rules.⁵ Rather, we requested a stay of *enforcement*. This is admittedly

emissions limits well below the Part 15 general limits; and Section 15.509(a), requiring a GPR's "UWB bandwidth" to lie below 960 MHz. We showed that each of these provisions was adopted without notice and comment, and/or without supporting evidence in the record.

² See Motion for Interim Stay of Enforcement of the Ground Penetrating Radar Industry Coalition at 7-8 (filed June 17, 2002). We nonetheless agreed not to contest the enforcement of rules barring GPR operation by consumers, and requiring coordination prior to operation near specific sensitive installations.

³ GPSIC Opposition at 2.

⁴ *Id.* at 5.

⁵ *Id.* at 2.

a fine distinction; but for once, legal technicality serves common sense. In particular, our motion avoids the "rule vacuum" that concerns GPSIC. The rules authorizing GPRs, including the four provisions at issue, can take effect as scheduled on July 15.⁶ We simply ask the Commission to stay enforcement of the four provisions pending reconsideration. The effect will be to authorize the certification and operation of GPRs, but without application of these provisions.

The salient fact underlying our motion -- the elephant in the room GPSIC tries so hard to overlook -- is that GPRs do not cause interference.⁷ The most implacable opponents of ultra-wideband, including Air Transport Association, PCS interests, the amateur radio community, and the DARS industry, have conceded as much.⁸ In particular, GPRs cause no interference to GPS. We prove this every working day: many GPRs operate with a GPS receiver fixed directly to the unit, just centimeters from the antenna, yet the GPS invariably functions perfectly.⁹

In short, a stay of enforcement will permit the GPR industry to continue delivering safety-of-life and other important benefits in the public interest while the Commission addresses the issues raised on reconsideration.

⁶ Indeed, we doubt the Commission could now stop the rules from taking effect without further proceedings. *See* 47 C.F.R. Sec. 1.108 ("The Commission may, on its own motion, set aside any action made or taken by it within 30 days from the date of public notice of such action") That 30-day period expired on June 17, 2002.

⁷ For details on why this is so, see our Petition for Partial Reconsideration at 5-8 (filed June 17, 2002).

⁸ *See id.* at 5-6 & n.3.

⁹ *See id.* at 8.

2. *Interim emissions limits*

Our Motion suggested the Commission restrict GPR operation to the Part 15 general limits, pending reconsideration. GPSIC now argues the Commission cannot adopt those limits without full rulemaking procedures.¹⁰ We disagree. The Notice of Proposed Rule Making suggested the Part 15 general limits for GPRs across the spectrum,¹¹ and no party presented evidence supporting tighter limits. The general limits therefore satisfy the APA rulemaking requirements. Indeed, these are the *only* limits acceptable under the APA. The emissions limits adopted in the proceeding are in violation of the APA;¹² and if GPSIC were right that even interim emissions limits need additional rulemaking procedures, then the Commission could not impose any interim GPR limits at all.

In any event, considering that GPRs have never caused interference in the past, there is no reason to expect interference at the Part 15 general limits, or even under no limits.

Finally, we dismiss as unrealistic GPSIC's concerns that GPR manufacturers will increase power above 1 GHz to improve resolution and penetration, and thus risk increasing interference.¹³ GPR devices in the 1 to 3 GHz range have seen widespread use over the past 15 years, primarily for non-destructive testing in urban areas, with no record of interference. One GPRIC member has been manufacturing a typical unit with a 1.5 GHz center frequency for over

¹⁰ GPSIC Opposition at 2-3.

¹¹ *Ultra-Wideband Transmission Systems*, 15 FCC Rcd 12086 at para. 39 (2000) (Notice of Proposed Rule Making).

¹² See Petition for Partial Reconsideration of the Ground Penetrating Radar Industry Coalition at 16-17.

¹³ GPSIC Opposition at 5.

20 years. The product is fully compliant with all of the recently adopted GPR rules, including those we are challenging. There is no practical way to greatly increase the power of an impulse antenna of this size. Even if there were, a tenfold power increase would improve the depth of penetration by a maximum of only 14% -- not worth the trouble. Still, if unbounded power increases were a valid concern, the Part 15 general limits would resolve it.

CONCLUSION

GPSIC's opposition to our Motion for Interim Stay of Enforcement is not well founded. GPSIC misreads the Motion as seeking a stay of the rules' taking effect, where it actually requests a stay of enforcement. The difference is important: as drafted, the Motion will permit the lawful marketing and operation of GPR equipment pending reconsideration.

We suggest interim application of the Part 15 general limits to GPRs -- the same limits identified for GPRs in the Notice of Proposed Rule Making, and the only limits that presently satisfy APA requirements. Based on decades of experience with GPRs, we are confident these levels of operation will not cause interference to GPS or any other users of the spectrum.

Respectfully submitted,

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July 1, 2002

CERTIFICATE OF SERVICE

I, Deborah N. Lunt, a secretary with the law firm of Fletcher, Heald & Hildreth, P.L.C., hereby state that a true copy of the foregoing "Reply to Opposition to Motion for Interim Stay of Enforcement and Motion for Acceptance of this Reply" was sent by first class mail, postage prepaid, on July 1, 2002, to the following:

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